

Application No. 10/594,042
Paper Dated: December 7, 2009
Attorney Docket No. 3135-062778

REMARKS

This Amendment is responsive to the July 7, 2009 Office Action. Claims 16 and 30 have been amended. Claims 16-30 are pending in this application.

Claim Objection

Claim 30 has been objected to as being in improper dependent form and for failing to further limit the subject matter of the previous claim. Claim 30 has been amended to be placed into independent form. Reconsideration and withdrawal of this objection are respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 16-18, 20-23 and 26-30 stand rejected under 35 U.S.C. § 103(a) for obviousness over United States Patent No. 6,494,278 to Weisz in view of United States Patent No. 5,540,297 to Meier. Claim 19 stands rejected under 35 U.S.C. § 103(a) for obviousness over Weisz in view of Meier and United States Patent No. 5,113,959 to Mastov et al. Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) for obviousness over Weisz in view of Meier and United States Patent No. 5,246,082 to Alber. In view of the following remarks, reconsideration of these rejections is respectfully requested.

Independent claim 16 recites, *inter alia*:

...a frame, at least two carrying wheels, whereby each carrying wheel is detachably connected to the frame by means of an insertable axle, and at least one electrical wheel motor for the electrical drive of the carrying wheels, whereby the wheel motor forms part of the detachable carrying wheel, wherein a stator of the wheel motor is provided with at least one support element for support on the fixed world.

The Weisz patent discloses a removable wheel (rim and tire supported by a drum) rotatably mounted on a hub having a common axis with the drum, and a shaft by which the hub portion is mounted for pivotal motion on its axis relative to the frame of the vehicle. A bracket is mounted on the hub or shaft and is disposed to engage a frame member of the vehicle to limit

rotational motion of the hub relative to the frame. The engagement takes place through a torque sensing device, which generates signals indicative of the direction and magnitude of reaction forces, and a control device for the motor receives the signals and applies feedback control to the motor according to the torque reaction developed between the wheel and the frame (see column 1, lines 45-62).

Meier discloses a wheelchair, which has wheels supported by rockers (7) having supporting wheels (15). A motor (3) has a stator at a bearing holder (12) and a rotor (20) on a motor housing (16). Due to the rotor (20), the housing (16) and the wheel (1) is rotated in relation to the bearing holder (12) for the rocker (7) (see column 3, lines 22-28).

The Weisz patent and the Meier patent, whether considered individually or in combination, fail to teach or suggest a stator of the wheel motor, which forms part of the detachable carrying wheel, being provided with at least one support element for support on the fixed world as recited in independent claim 16. The Weisz patent fails to disclose a stator of the wheel motor being provided with at least one support element. In contrast, Weisz discloses the torque sensing device and controller coupled therewith, as described above, to control the torque of a driven wheel on the frame of the wheelchair. The Meier patent also fails to disclose a stator of the wheel motor, which forms part of the detachable carrying wheel, being provided with at least one support element for support on the fixed world as in the claimed invention. The stator of the motor (3) in the Meier patent is secured to the bearing holder (12) of the rocker (7). Accordingly, the wheel motor of Meier does not form part of the detachable carrying wheel as in the claimed invention. Further, the supporting wheels (15) of Meier do not support the fixed world in normal operating conditions.

Moreover, Applicant respectfully submits that one of ordinary skill in the art would not modify the wheelchair of Weisz to provide the alleged support element of Meier as asserted by the Examiner at page 3 of the Office Action. As indicated above, the wheelchair of Meier is not in the field of detachable wheels, and therefore, does not have the problem of torques occurring to a stator of a wheel motor with respect to the frame of the wheelchair. Thus, there is no motivation to modify Weisz in view of Meier to address such a problem. Further, modifying the wheelchair of Weisz to provide the support element of Meier for support on the

Application No. 10/594,042
Paper Dated: December 7, 2009
Attorney Docket No. 3135-062778

fixed world would render Weisz unsatisfactory for its intended purpose (see MPEP § 2143.01). In particular, modifying Weisz to provide a support element for support on the fixed world would block the torque sensing device thereby disabling the control system for the motor.

Therefore, for at least the foregoing reasons, the Weisz patent and the Meier patent fail to render independent claim 16 obvious.

Amended independent claim 30 recites, *inter alia*:

...at least one electrical wheel motor for an electrical drive of the carrying wheel, wherein the at least one electrical wheel motor includes a stator having at least one support element for support on the fixed world.

The Weisz patent and the Meier patent, whether considered individually or in combination, fail to teach or suggest at least one electric wheel motor including a stator having at least one support element for support on the fixed world as recited in amended independent claim 30. The stator of the motor (3) in the Meier patent is secured to the bearing holder (12) of the rocker (7) and fails to disclose a carrying wheel having a stator with a support element as in the claimed invention. Further, amended independent claim 30 is believed to be patentable over the cited references for the reasons discussed above in connection with independent claim 16. Therefore, the Weisz patent and the Meier patent fail to render amended independent claim 30 obvious.

With respect to dependent claim 19, Applicant respectfully submits that the cited references fail to teach or suggest where the support element is set for support on the fixed world at several locations, at a distance from each other. The Mastov patent discloses a support to the fixed world that supports at a variable location, but only one at a time. Thus, the device of Mastov does not disclose a support element set for support on the fixed world at several locations at a distance from each other. Therefore, claim 19 is believed to be patentable over the cited references.

Claims 17-29 depend from, and include all of the limitations of, independent claim 16 and are believed to be patentable for the reasons discussed above in connection with independent claim 16.

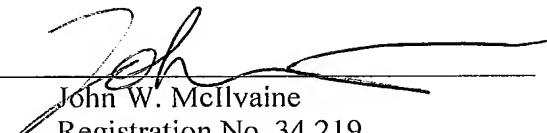
Reconsideration and withdrawal of these rejections are respectfully requested.

Application No. 10/594,042
Paper Dated: December 7, 2009
Attorney Docket No. 3135-062778

CONCLUSION

In view of the above remarks, reconsideration of the objection and rejections and allowance of claims 16-30 are respectfully requested.

Respectfully submitted,
THE WEBB LAW FIRM

By 
John W. McIlvaine
Registration No. 34,219
Attorney for Applicant
436 Seventh Avenue
700 Koppers Building
Pittsburgh, PA 15219
Telephone: (412) 471-8815
Facsimile: (412) 471-4094
E-mail: webblaw@webblaw.com